

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Currently Amended) A device for generating electromagnetic waves, in particular for data transfer between a motor vehicle and a data storage medium, comprising:
an energy supply device for providing an alternating voltage;
an oscillating circuit comprising a capacitance connected in parallel with an inductance to which the alternating voltage is applied for generating the electromagnetic waves, and
a choke coil between at least one part of the energy supply device and the oscillating circuit.
2. (Original) The device according to Claim 1, wherein the energy supply device has a terminal capable of being switched over between two voltages which is connected through the choke coil to an oscillating circuit terminal.
3. (Original) The device according to Claim 2, wherein the energy supply device has a further terminal capable of being switched over between two voltages which is connected through a capacitor or a transmitting coil of the oscillating circuit to the one oscillating circuit terminal.

4. (Currently Amended) The device according to Claim 1, wherein the energy supply device contains a DC voltage source, a converter coil and ~~two~~ a first and second push-pull switches, the DC voltage source is connected by way of the choke coil to an inner tapping point of the converter coil whose outer tapping points are connected ~~in each case to one of the~~ first and second push-pull switches, respectively which assume switching states in push-pull fashion, and the output voltage from the outer tapping points of the converter coil is applied to the oscillating circuit.

5. (Original) The device according to Claim 4, wherein the converter coil is formed by an autotransformer.

6. (Original) The device according to Claim 4, wherein a switch is provided between the DC voltage source and the choke coil such that in the event of simultaneous closure of the push-pull switches and opening of the switch the oscillation of the oscillating circuit decays abruptly.

7. (Original) The device according to Claim 6, wherein the push-pull switches are switched in tune to the natural frequency of the oscillating circuit, the switch is switched in tune to the switching frequency of the push-pull switches and is operated with a selectable pulse width.

8. (Currently Amended) The device according to Claim 6, wherein a terminal is provided between the switch and the choke coil, to which is connected a free-wheeling diode.

9. (Original) The device according to Claim 4, wherein one terminal side of a diode is connected between the choke coil and the inner terminal of the converter coil and the other terminal side of the diode is connected to the DC voltage source.

10. (Original) The device according to Claim 4, additionally comprising a transformer, having a primary coil and a secondary coil which are coupled magnetically, whereby the primary coil is connected to the outer tapping points of the converter coil and one output of the secondary coil is connected to the one oscillating circuit terminal and the other output of the secondary coil is connected by way of a capacitor or a transmitting coil of the oscillating circuit to the one oscillating circuit terminal.

11. (Original) The device according to Claim 4, wherein the converter coil is the primary coil of a transformer, and one output of the secondary coil of the transformer, which is magnetically coupled to the primary coil, is connected to the one oscillating circuit terminal and the other output is connected by way of a capacitor or a transmitting coil of the oscillating circuit to the one oscillating circuit terminal.

12. (Original) A method for operating a device for generating electromagnetic waves comprising the steps of:

- providing an DC voltage by an energy supply device;
- applying the DC voltage to an oscillating circuit for generating the electromagnetic waves;
- coupling a choke coil between at least one part of the energy supply device and the oscillating circuit; and
- operating the choke coil in the saturation state at times during the transient condition of the oscillating circuit.

13. (Original) The method according to claim 12, wherein the step of providing the DC voltage is performed in accordance with data to be transmitted, and includes the step of switching between two voltages at a frequency tuned to the natural frequency of the oscillating circuit in order to identify a high level state or a low level state relating to the data to be transmitted.

14. (Original) A method for operating a device for generating electromagnetic waves comprising the steps of:

- providing an DC voltage by an energy supply device;
- switching the DC voltage to an inner tapping point of a converter coil;
- coupling the outer tapplings of the converter coil with an oscillating circuit; wherein the switching and coupling can be performed in such a way that the oscillating circuit decays abruptly.

15. (Original) The method according to claim 14, wherein the abrupt decay can be reached by decoupling of the inner tapping point and grounding of the outer tapping point.

16. (Original) The method according to claim 14, wherein the switching closes while a particular data state obtains or is operated in tune to the natural frequency of the oscillating circuit with a selectable pulse width.

17. (Original) The method according to Claim 14, wherein a pulse width of the switching is determined depending on the data to be transmitted.